

APPENDIX B: PENDING CLAIMS

39. An isolated nucleotide comprising a sequence region that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.
40. The isolated nucleotide of claim 39, wherein said sequence region comprises at least 21 contiguous nucleotides from nucleotide 122 to nucleotide 970 of SEQ ID NO:1.
41. The isolated nucleotide of claim 40, wherein said sequence region comprises at least 30 contiguous nucleotides from nucleotide 122 to nucleotide 970 of SEQ ID NO:1.
42. The isolated nucleotide of claim 41, wherein said sequence region comprises at least 40 contiguous nucleotides from nucleotide 122 to nucleotide 970 of SEQ ID NO:1.
43. The isolated nucleotide of claim 42, wherein said sequence region comprises the sequence from nucleotide 122 to nucleotide 970 of SEQ ID NO:1.
44. The isolated nucleotide of claim 42, comprising the sequence of SEQ ID NO:1.
49. The isolated nucleotide of claim 39, wherein said nucleotide is from about 849 to about 1,000 basepairs in length.
50. The isolated nucleotide of claim 39, wherein said sequence region that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2 is operably positioned under the control of a promoter.
51. The isolated nucleotide of claim 39, wherein said sequence region that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2 is operatively linked to a second coding region that encodes a selected peptide or polypeptide, said nucleotide encoding a methylthioadenosine phosphorylase fusion peptide or polypeptide.

- 52. The isolated nucleotide of claim 39, comprised within a vector.
- 53. The isolated nucleotide of claim 39, comprised within a host cell.
- 67. A vector comprising a nucleotide sequence that encodes a mammalian methylthioadenosine phosphorylase polypeptide comprising the amino acid sequence of SEQ ID NO:2.
- 68. The vector of claim 67, wherein said nucleotide sequence comprises the nucleic acid sequence of SEQ ID NO:1.
- 69. The vector of claim 67, comprised within a host cell.
- 70. A host cell comprising a nucleotide sequence not normally found within the cell and that encodes a mammalian methylthioadenosine phosphorylase polypeptide comprising the amino acid sequence of SEQ ID NO:2.
- 71. The host cell of claim 70, wherein said nucleotide sequence comprises the nucleic acid sequence of from about nucleotide 122 to nucleotide 970 of SEQ ID NO:1.
- 72. The host cell of claim 70, wherein said cell is a prokaryotic host cell.
- 73. The host cell of claim 70, wherein said cell is a eukaryotic host cell.